

CLAIMS

WHAT IS CLAIMED IS:

- 1 1. A method for providing reference information to a user of a wireless terminal operating within a wireless network, comprising:
 - 3 receiving a request identifier entered by the user at the wireless terminal to identify desired reference information corresponding to the request;
 - 5 presenting the desired reference information to the user via the wireless terminal if the desired reference information is locally stored at the wireless terminal;
 - 8 transmitting the request identifier from the wireless terminal to a data server operating within a second network via a gateway bridging the wireless network and the second network, if the desired reference information is not locally stored at the wireless terminal;
 - 12 presenting the desired reference information obtained from the data server if the desired reference information is available on the data server.
- 1 2. The method of Claim 1, further comprising providing navigational software delivered at least in part via a WAP service to the wireless terminal, to facilitate entry of the request identifier and transmission of the request identifier to the data server if the desired reference information is not locally stored at the wireless terminal.
- 1 3. The method of Claim 1, further comprising locally storing the reference information obtained from the data server at the wireless terminal.
- 1 4. The method of Claim 3, wherein storing the reference information at the wireless terminal further comprises monitoring at least one predetermined storage condition indicative of whether to locally store the reference information obtained from the data server at the wireless terminal.

1 5. The method of Claim 4, wherein monitoring at least one
2 predetermined storage condition comprises determining whether the wireless
3 terminal has sufficient storage capacity to locally store the reference information
4 obtained from the data server.

1 6. The method of Claim 4, wherein monitoring at least one
2 predetermined storage condition comprises determining whether the request
3 identifier is among a predetermined number of most frequently requested request
4 identifiers.

1 7. The method of Claim 4, wherein monitoring at least one
2 predetermined storage condition comprises determining whether the request
3 identifier is among a predetermined number of most recently requested request
4 identifiers.

1 8. The method of Claim 4, wherein monitoring at least one
2 predetermined storage condition comprises determining whether the request
3 identifier has been requested at least a predetermined number of times.

1 9. The method of Claim 8, further comprising determining whether the
2 request identifier has been requested the predetermined number of times within a
3 predetermined period of time.

1 10. The method of Claim 4, further comprising providing a selectable
2 option to locally store the reference information obtained from the data server at the
3 wireless terminal, and wherein monitoring at least one predetermined storage
4 condition comprises determining whether the option to locally store the reference
5 information has been selected.

1 11. The method of Claim 1, further comprising:
2 determining whether a predetermined activity condition is fulfilled; and
3 initiating a default activity upon fulfillment of the predetermined activity
4 condition.

1 12. The method of Claim 11, wherein:
2 determining whether a predetermined activity condition is fulfilled
3 comprises determining whether there is user input inactivity for a predetermined
4 time period; and
5 initiating a default activity comprises initiating the search for the
6 desired reference information upon expiration of the predetermined time period.

1 13. The method of Claim 11, wherein:
2 determining whether a predetermined activity condition is fulfilled
3 comprises determining whether there is user input inactivity for a predetermined
4 time period; and
5 initiating a default activity comprises presenting a notification to the
6 wireless terminal user that retrieval of the desired reference information from the
7 data server will incur a cost to the user, wherein presenting the notification occurs
8 upon expiration of the predetermined time period if the desired reference
9 information is not locally stored at the wireless terminal.

1 14. The method of Claim 11, wherein:
2 determining whether a predetermined activity condition is fulfilled
3 comprises determining whether there is user input inactivity for a predetermined
4 time period; and
5 initiating a default activity comprises executing a function
6 corresponding to a default link associated with navigational software provided at the
7 wireless terminal, wherein the function corresponding to the default link is executed
8 upon expiration of the predetermined time period.

1 15. The method of Claim 11, wherein:
2 determining whether a predetermined activity condition is fulfilled
3 comprises monitoring for entry of an initiation command; and
4 initiating a default activity comprises initiating a function associated
5 with a highlighted link on a graphical display of the wireless terminal, wherein the

6 function associated with the highlighted link is executed upon entry of the initiation
7 command.

1 16. The method of Claim 1, wherein the data server is a dictionary server,
2 and the desired reference information is at least one of dictionary definitions and
3 language translations.

1 17. A wireless device for initiating requests for reference information from
2 a wireless network and obtaining requested reference information in response
3 thereto, wherein the wireless network is configured to communicate with a second
4 network having an information server via a gateway, the wireless device
5 comprising:

6 an input user interface to receive the requests for reference
7 information;

8 a memory to store reference information received at the wireless
9 device;

10 an output user interface to present the reference information
11 corresponding to the requests;

12 a processor configured to search the memory for the reference
13 information corresponding to the request, to transmit the requests for reference
14 information to the information server in the second network to obtain the reference
15 information from the information server if the reference information is not stored in
16 the memory, and to present the reference information obtained from either the
17 memory or the information server via the output user interface.

1 18. The wireless device as in Claim 17, wherein the wireless device is
2 Wireless Application Protocol (WAP)-compliant, and wherein the requests
3 transmitted to the second network are transmitted via the Wireless Application
4 Protocol.

1 19. The wireless device as in Claim 17, wherein the requests for
2 reference information are transmitted from the wireless device as a Uniform
3 Resource Locator (URL).

1 20. The wireless device as in Claim 17, wherein the requests for
2 reference information are transmitted from the wireless device as a Uniform
3 Resource Locator (URL) having an associated index reference to identify the
4 reference information from within the information identified by the URL.

1 21. The wireless device as in Claim 17, wherein the processor is further
2 configured to locally store the reference information obtained from the information
3 server at the wireless terminal.

1 22. The wireless device as in Claim 21, wherein the processor is further
2 configured to monitor at least one predetermined storage condition indicative of
3 whether to locally store the reference information obtained from the information
4 server at the wireless terminal.

1 23. The wireless device as in Claim 21, wherein the processor is further
2 configured to monitor at least one predetermined activity condition, and to initiate a
3 default activity upon fulfillment of the predetermined activity condition.

1 24. The wireless device as in Claim 23, wherein the predetermined
2 activity condition is a predetermined time period, and the default activity is a search
3 for the reference information performed upon expiration of the predetermined time
4 period.

1 25. A communication system for communicating reference information,
2 comprising:

3 a network of computing systems, wherein at least one of the
4 computing systems comprises a server computing system;
5 a wireless network;
6 a gateway computing system configured to bridge communications
7 between the network of computing systems and the wireless network;
8 at least one wireless device to communicate via wireless
9 transmissions within the wireless network and to communicate with the server in the

10 network of computing systems via the gateway in accordance with a predefined
11 protocol, wherein the at least one wireless device comprises:
12 (a) an input user interface to receive the requests for reference
13 information;
14 (b) a memory to store reference information received at the
15 wireless device;
16 (c) an output user interface to present the reference information
17 corresponding to the requests;
18 (d) a processor configured to search the memory for the reference
19 information corresponding to the request, to transmit the requests for
20 reference information to the server to obtain the reference information from
21 the server if the reference information is not stored in the memory, and to
22 present the reference information obtained from either the memory or the
23 server via the output user interface.

1 26. The system as in Claim 25, wherein the gateway computing system is
2 a Wireless Application Protocol gateway and wherein communications between the
3 wireless device and the server are conducted in accordance with the Wireless
4 Application Protocol.

1 27. The system as in Claim 25, wherein the wireless device is Wireless
2 Application Protocol compliant, and wherein the communication between the
3 wireless device and the server is effected via the Wireless Application Protocol.

1 28. The system as in Claim 25, wherein the server computing system is a
2 dictionary server computing system.

1 29. The system as in Claim 25, further comprising an information filter
2 coupled to the server to convert the information retrieved from the server from a
3 first format into a second format.

1 30. The system as in Claim 25, further comprising an information filter
2 coupled to the server to convert the information retrieved from the server from
3 Hypertext Markup Language (HTML) to textual HTML.

1 31. The system as in Claim 25, wherein the wireless device is a wireless
2 telephone.

1 32. A computer-readable program storage medium tangibly embodying a
2 program of instructions executable by a computing system to process reference
3 information requests by performing steps comprising:

4 receiving a request identifier entered by the user at the wireless
5 terminal to identify desired reference information corresponding to the request;
6 presenting the desired reference information to the user via the
7 wireless terminal if the desired reference information is locally stored at the wireless
8 terminal;

9 transmitting the request identifier from the wireless terminal to a data
10 server operating within a second network via a gateway bridging the wireless
11 network and the second network, if the desired reference information is not locally
12 stored at the wireless terminal;

13 presenting the desired reference information obtained from the data
14 server if the desired reference information is available on the data server.

1 33. The computer-readable program storage medium as in Claim 32,
2 wherein the program of instructions further performs steps comprising receiving the
3 desired reference information at the wireless terminal from the gateway.

1 34. The computer-readable program storage medium as in Claim 32,
2 wherein the program of instructions for transmitting the request identifier and for
3 receiving the desired reference information comprises communicating the request
4 identifier and the desired reference information via Wireless Application Protocol.

1 35. An apparatus for obtaining reference information via a wireless
2 terminal operating within a wireless network, comprising:

3 means for presenting an input interface for a wireless terminal user to
4 input a request for desired reference information;
5 means for searching local data storage of the wireless terminal for the
6 desired reference information corresponding to the request;
7 means for presenting the desired reference information via an output
8 interface if the desired reference information is stored in the local data storage;
9 means for transmitting the request to at least one data server
10 configured within a remote network exclusive of the wireless network;
11 means for receiving the particular reference information at the
12 wireless terminal from the reference server if the desired reference information was
13 available on the reference server; and
14 means for presenting the desired reference information obtained via
15 the reference server to the user.